

## Appendix A

Appendix A shows an alignment of SEQ ID NO:2 of the pending claims with the pepper cytochrome P450 polypeptide (NCBI GI No. 6739506). Conservative amino acid changes by an arrowhead on the top row. Amino acids identical among the two sequences are indicated with an asterisk (\*) above the alignment; dashes are used by the program to maximize alignment of the sequences. The two motifs of Choe et al. (*The Plant Cell* (1998) 10: 231-243) appear underlined in the alignment.

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**      *  *A*****  AAAAAA **  *  *****A*****  **  AA  *  A  A  *A*****  *A*****A*****
gi6739506  ME--IQFTN-LVAFFLLSIIILLKKKKTKQLNLPFGKWLPIFGISLHLHAVGLPHGLKLNLAKEYLGPLMHLRLGEIPTVIISSPR
SEQ ID NO:2 MEQKNLSFSPSILISLLVLI-LVVMRLAKKO--NPPPGWKFPPIIGNPLPHLLTSLDLGHERFRALAOYGPVMSLOIGOVSAVVISAE

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gi6739506 MAKEVLKTHDLAFATRPKLVDIVHYDSTDIASFPGVEYWRQIRKICILELLSAKMKVFFSSIRQDELSMVMSSIRTMPNFPVNLTKDI  
SEQ ID NO:2 AAKEVMKTOADAFAORPIVLDAQIVFYNRKDLVLSFGDHWROMKKIWILEFLSAKVKOSSPLRIIEEMEDAITFLRSKAGSPVNITKII

gi6739506 FWFSTSSVTCRSLGKICRDQDKLIIFMREIISLTGGFSIADFFPTWKMLHDVGGSKTRLLKAHRKIDEILEHVHVEHKQNRADGQKNGE  
SEQ ID NO:2 YGIIISIMIRTSVGN-CKOKERLLSVADAVNEAATSEFGTDAFFPTWKLLHYIGAESKPRRLHOEIDDLIEILNEHKANKP-----

gi6739506 FGGEDLIDVLLRVRESGEVQISITDDNIKSILVDMFSAGSETSTSTIIWALAEMMKPKVSLAKAQAEVQRVLKEKGFQIIDLDELKYLK  
SEQ ID NO:2 FEADNIMDVLLNLKNGNVPVPTNESIKASVLOMFTAGSETTSKATEVWMAELMKNPTELRAKQOEVRVFGEMGKVDSESRFHLDKFFK

gi6739506 LVIKETLRMHPPILLVPRECKMTKDIDGYNIPFKTRIVNMAWAIGRDPESWDDPEFSFPERFENSVDVLGSHQFIPFGAGRRICPGM  
SEQ ID NO:2 LVVKETLRLHPPV-VLIPRECRETTRIDGYEIHNPTRIVNMAWAIGRDPNTWSEPGKFNPERFKDCAIDYKGTTFELVPFGAGKRICPGI

gi6739506 LFGLANVGQPLAQLLYHFRKPLNGQSHENLDMTSPGISATRKDDLVIATPYD-----P  
SEQ ID NO:2 TSAINTLEYVIINLLYHFNWELADGITPOTLDMTEAIGGALKKKIDKLPIPIYOVSIGNSIS